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ACCEPTED MANUSCRIPT

SHAPE CHANGE IN THE ATLAS WITH CONGENITAL MIDLINE NONUNION

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2	OF ITS POSTERIOR ARCH: A MORPHOMETRIC GEOMETRIC STUDY
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16	
17	ABSTRACT
18	
19	BACKGROUND CONTEXT: congenital midline nonunion of the posterior arch of the atlas is a
20	developmental variant present at a frequency ranging from 0.7% to 3.9%. Most of the
21	reported cases correspond to incidental findings during routine medical examination. In cases
22	of posterior nonunion, hypertrophy of the anterior arch and cortical bone thickening of the

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